

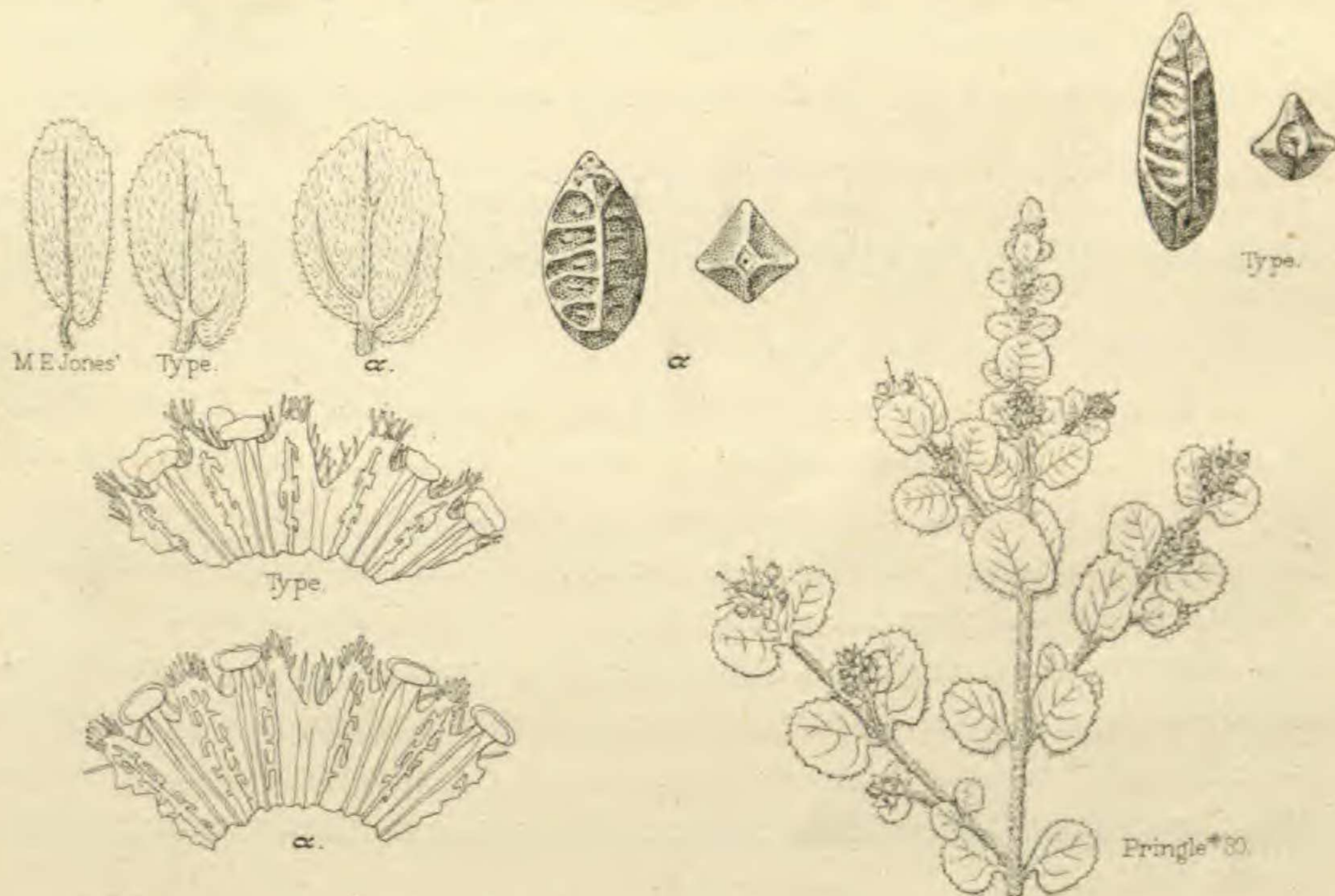
BRIEFER ARTICLES.

NOTES AND NEW SPECIES OF THE GENUS EUPHORBIA.

EUPHORBIA STICTOSPORA Engelm., Mex. Bound. Bot. 187.

The following characters are drawn from the type.

Involucral glands irregular, transverse, the fifth represented by a small lobe or absent; lobes triangular, hairy, the two flanking the deep



EUPHORBIA STICTOSPORA AND VAR. *TEXENSIS*.¹

sulcus columnar; appendages three-lobed, rudimentarily one-lobed, crenate, a mere semblance to an appendage, or entirely absent. Seeds pinkish-ashen, elongated-tetragonal, 1.4–1.5^{mm} long, .5^{mm} broad, section more triangular than tetragonal as the ventral angle is obscure, dorsal and lateral angles prominent, rounded, dorsal facets concave, the ven-

¹ In the cuts the portions of plants and the leaves are natural size; the involucre enlarged and diagrammatic, and the seeds enlarged.

tral convex, linea ventralis slight; surface marked with short and irregular interrupted rugae, not pitted.

Type from Kansas, *Fendler* no. 789, co-types New Mexico, Santa Fé, *Fendler* no. 797 and Doña Ana, *Wright* no. 59 (*omnia visa*). The following specimens agree well with type: Colorado, *Marcus E. Jones* no. 786 (1878); Durango, Mexico, *Dr. Edward Palmer* no. 43 (1896), *BOT. GAZ.* 25:19, 1898; Chihuahua Mexico, *C. G. Pringle* no. 1076 (1886) and his Coahuila, Mexico, no. 80 (1885).

Var. a. Texensis, var. nov.—Similar to the species in general habit, but less hairy and of looser growth, with longer internodes. Lobes of the involucre columnar, pseudolobe a deep sulcus with a long linear pseudogland at its fundus; appendages very narrow, entire, and generally present. Seeds bluish-ashen, strongly tetragonal, 1^{mm} long, .6^{mm} broad, the dorsal facets concave, the ventral plane, all marked by strong, sharp, transverse rugae, that show only a tendency to anastomosis and interruption.

Texas, southern portion, altitude 1600–2000 ft., *A. A. Heller*, nos. 1913, 1918 (1894).

EUPHORBIA COROLLATA L.

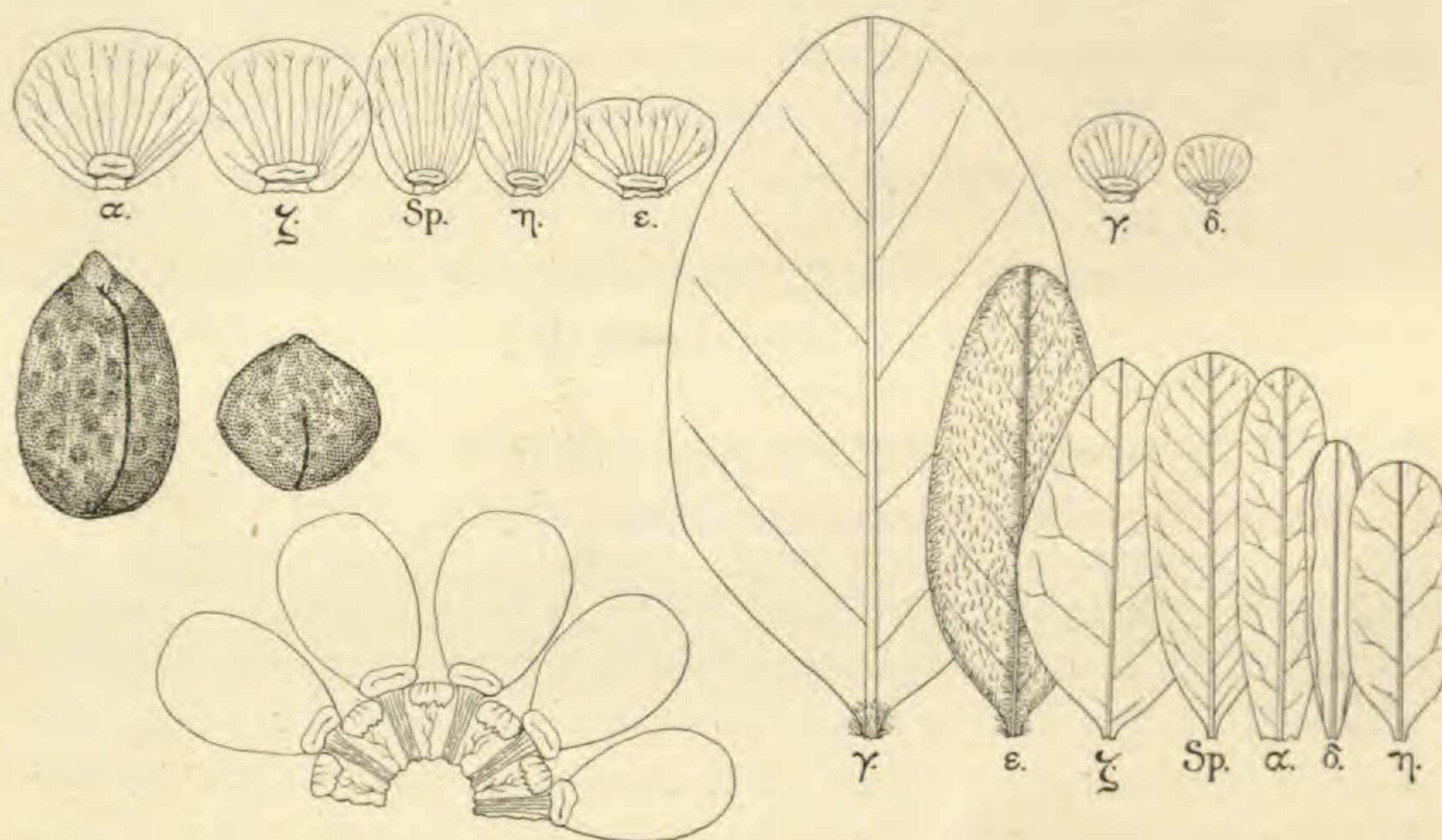
In this species, the most showy of the eastern United States, there is almost unlimited form variation in the general appearance of the plants from different localities, among which those given below may be considered good varieties by strong and reproducing differences in their leaves and glandular appendages. In all the forms and varieties the seeds maintain their full and distinctive characters; they are white-cinereous, ovate-pyriform with a strong nipple-like tip, sub-globular in section, 2.5^{mm} long, 2^{mm} broad, linea dorsalis a rounded evident keel, linea ventralis a dark evident groove, the surface marked with irregular, very shallow, pits.

Sp. COROLLATA L., *Amœn. Acad.* 3:122.—Leaves sub-petiolate, spatulate oblong, glabrous, green both sides, 3^{cm} long, 2^{cm} broad. Floral pedicels 4^{mm} long, strict and filiform; appendages oval, plane 3.7^{mm} long, 2.1^{mm} broad.

Var. a. GRANDIFLORA Boiss., *DC. Prod.* 15²:67.—Leaves strongly sessile, lanceolate to narrow-lanceolate, glabrous, green both sides, 2.8^{cm} long, 1.4^{cm} broad, less veined than in the species. Floral pedicels 8^{mm} long, strict and filiform, appendages broadly ovate, spreading and drooping, 3.3^{mm} long, 4^{mm} broad.

Var. β. SUBPETIOLATA Boiss., *loc. cit.*—I have not been able to recognize this form.

Var. γ. PANICULATA (Ell.) Boiss., *loc. cit.* (*E. paniculata* Ell., Sk. 2:660.)—Leaves petiolulate, hairy at the petiole only, green above, paler beneath, ovate, 5.5^{cm} long, 3^{cm} broad. Floral pedicels 3^{mm} long, erect and sarcous appendages broadly oval, 1.6^{mm} long, 2^{mm} broad.



EUPHORBIA COROLLATA AND FORMS.

Var. δ. ANGUSTIFOLIA Ell., Sk. 2:659.—Open and widely spreading, openly paniculate-branched above. Leaves sessile, linear, the margins revolute, dark green above, pale beneath, veins not evident, 2–2.3^{cm} long, 3^{mm} broad. Floral pedicels filiform, ascending, 3–7^{mm} long; appendages, ascending, oval 1.4^{mm} long, 1.7^{mm} broad.

Var. ε. molle, var. nov.—Hairy throughout, 25^{cm} high; root fusiform: stems erect, denuded below, branches unbelliform, short, with leaves as on the stems: leaves petiolate, green above, pale green or lurid beneath, soft downy both sides but especially beneath, oblong ovate, 3.5^{cm} long, 1.6^{cm} broad, inflorescence solitary at the bifurcations, peduncles sarcous, 1.3–2.5^{cm} long; involucre large; appendages broad and generally partially incised into more or less equal lobes 2.2^{mm} long, 3.1^{mm} broad. Alabama, Earle & Baker no. 13 (1897).

Var. ζ. glauca, var. nov.—Glabrous, 35–45^{cm} high; stems denuded below, branches unbelliform, nude except a single leaf at the base:

leaves sessile, pale above, glaucous beneath, strongly oval to ovate, few veined, 3^{cm} long, 1.6^{cm} broad or smaller: inflorescence solitary at the bifurcations of the branchlets, peduncles filiform, 8^{mm}–2^{cm} long; appendages drooping, broadly oval, 3.2^{mm} long, 4^{mm} broad. Alabama, *Dr. Vasey*, 1880.

Var. η. JOORII Norton, Rept. Mo. Bot. Gard., 9: 155. 1898.—Low, 10–14^{cm} high, branching from the base, glabrous or pubescent: leaves ovate or oblong, subpetiolate, 2.2^{cm} long, 8–10^{mm} broad: inflorescences solitary in the bifurcations of the upper branchlets, peduncles filiform, 10–25^{mm} long; appendages elliptical, 3^{mm} long, 2^{mm} broad. Milano, Texas, *Dr. Joor*.

Var. θ. apocynifolia (Small). *Euphorbia apocynifolia* Small, Bull. Torr. Club 25: 467. 1898.—Leaves oblong, tapering at the base into a hairy petiole 3–6^{mm} long; inflorescence open umbelliform, rays ascending, wiry, dichotomous; involucre small, globular-bell shaped, hairy in our specimens, glands roseate like those of vars. *paniculata* and *angustifolia*; appendages 0.7 to 1^{mm} long, 0.9 to 1.2^{mm} broad, shaped like those of var. *paniculata*.

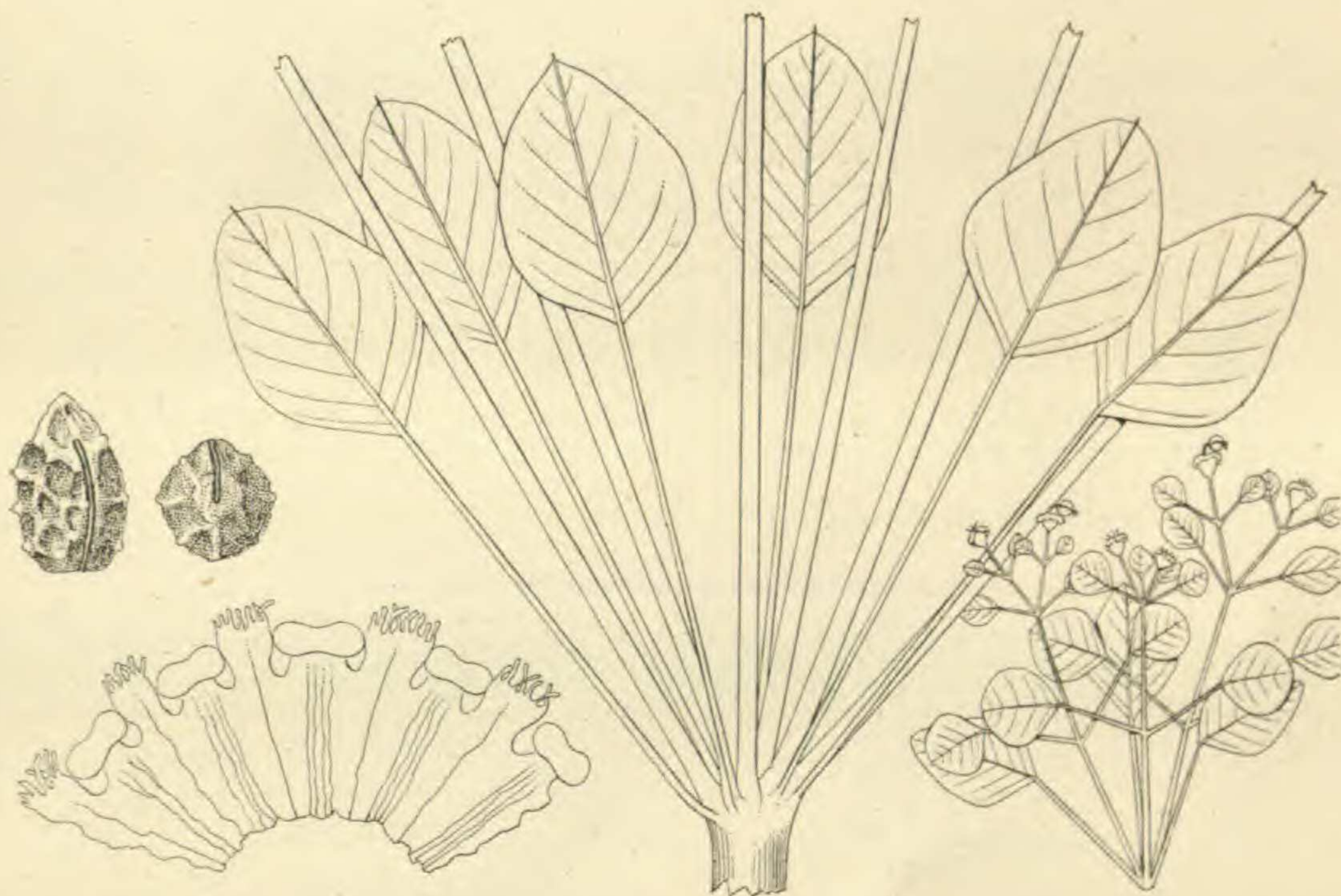
This form manifestly connects var. *angustifolia*, through Pollard's Mississippi 1289 (1896), with var. *paniculata*; it has no characters sufficiently prominent to consider it a species, while its seeds are not distinguished from those of *E. corollata*. Florida, Nash no. 2567 (1895), distributed as *E. corollata paniculata*.

Euphorbia Nelsonii, sp. nov.—Fruticosa, glabra, longe et corymbosæ ramosa, ramis teretis, internodiis longis, cortex maculatis, maculæ oblongis roseus. Foliis inferioris fasciculatis, petioliis longis filamentosis, pagina tenuis ovato-cuneatis, obtusis, apiculatis, foliis floralibus oppositis, orbiculatis petiolis limbum æquantis. Involucris terminalibus corymbosis, pedunculatis, campanulatis glabris, lobis latis truncatis irregulariter 6–8-fimbriatis, glandulis 5, transversis oblongis integris, appendicibus minutis vel nullis. Stylis longis revoluto-circinalis. Capsulæ luridæ profunde tri-sulcatæ, semine sub-globosis pallide-fuscis, scrobiculatis, linea media nigra geminatis, rugæ anastomosantis tuberculatis 2^{mm} long, 1.9^{mm} lat.

Ad Insula Maria Madre, Insulæ Tres Mariæ, Mexici, coll. E. W. Nelson m. Maius 1897, num. 4284. Internodii 10–12^{cm} long., petiolo 3–4.5^{cm}, pagina 1.5–2^{cm} long, 1.3–1.5^{cm} lat., prox. *E. petiolaris*.

Euphorbia Hellerii, sp. nov.—Glabra, caulibus pluries ascendentibus laxis foliatis, foliis alternatis spathulatis petiolulatis obtusis, umbellæ 3-

radiatæ, radiis 2-tum 3-fidis, foliis plus minus carnosis e basi sessili orbiculatis cuneatis obtusis apiculatis integris. Involucris breviter turbinatis solitariis in dichotomiis terminalibusque parvis, brevis pedicellatis, tenuissimus translucidis et laxis, lobis incurvis truncato-spatulatis, ad



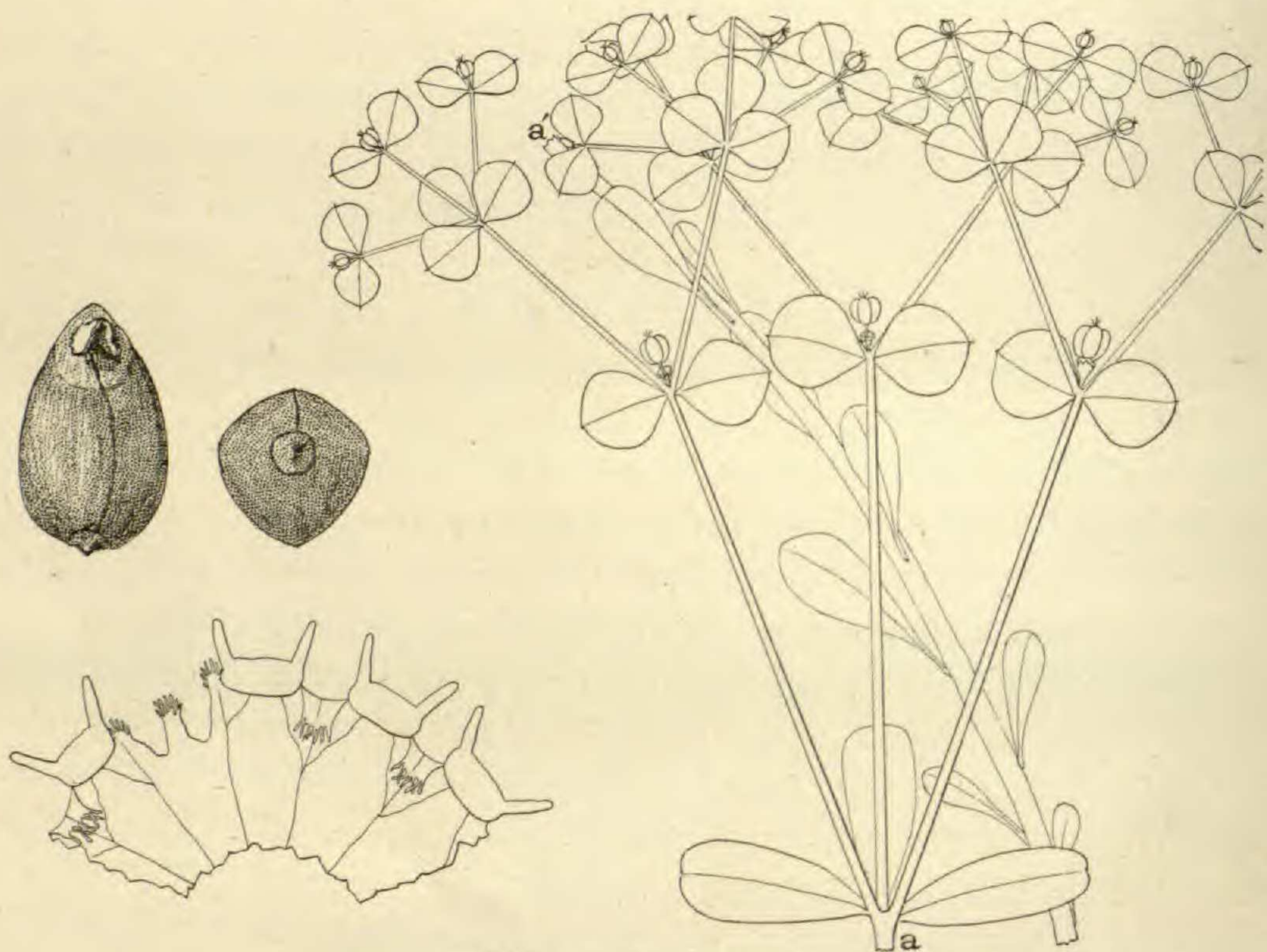
EUPHORBIA NELSONII.

apice fimbriatis, ad sinus minor et erectis, glandulis 4, bicornatis quintus, pseudolobis columnaro-fimbriatis in sinus involucris substitutere. Styli recurvis as apice in lobis claveo-stigmatosis bifurcatis. Capsulæ profunde trisulcatæ coccis dorso-rotundato laevis. Semine laevis cinereus vel virido-cinereus, ovato in sectio triangulo-subphaerico 1.7^{mm} long, 1.2^{mm} lat., linea dorsalis notatis, caruncula conica tenuissima depressa.

Ad Corpus Christi in ditone Texas. A. A. Heller, m. Martius, 1894, num. 1509. Folius ramulosis, 1.7^{cm} long., 6^{mm} lat., fol. radiis 6-8^{mm} long. et lat. Habitus *E. Peplæ*, sed. prox. *E. multicaulæ*. Symboli in herb. C. F. M., et herb. U. S. Nat. Mus., num. 213 et 921.

EUPHORBIA HIRSUTA (Torr.) Wiegand.—In raising this form of *E. Preslii* Guss.? to a species in BOT. GAZ. 24:49-52. pl. 3. (Britt. & Brown Illustr. Flora N. A. 3:518, fig. 2341a), Mr. K. M. Wiegand resurrects an old specific name, and adds one more synonym to the unfortunate American relative of that puzzling triune (?) *hypericifolia-*

Preslii-nutans, the types of which have never been studied closely by any American. *E. hirsuta* Kit. ex Boiss. in DC. Prod. 15²: -116; and *E. hirsuta* Schur., Verh. Sieb. Ver. Nat. 4:66 are plants of a section far removed from Dr. Torrey's *E. hypericifolia* var. *hirsuta* which,



EUPHORBIA HELLERII.

for the present, at least, it is better to let alone. Professor Greene noting this synonymizing of Mr. Wiegand (Pitt. 3:207) adds one more name for good measure, *E. Rafinesquii*, and all because the good Linné did not mention the fact that his type of *E. hypericifolia* was hairy!

EUPHORBIA BRASILIENSIS Lam.—In making up his Durango sets for distribution, Dr. Edward Palmer mixes this species with his *E. Preslii* Guss.? under no. 894. The black seeded specimens are *E. Preslii*, the cinereous ones *E. Brasiliensis*.—CHARLES F. MILLSPAUGH, *Field Columbian Museum, Chicago*.

JOSEPH F. JOOR.¹

THE south has always been a land of peculiar botanical interest. Its vegetation, bordering on the tropical, many years ago attracted the

¹While working with Dr. Joor's plants, purchased by the Missouri Botanical